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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,868

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Hiroyuki Iida

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EXAMINER

KAYRISH, MATTHEW

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/802,868	Applicant(s) IIDA, HIROYUKI	
	Examiner MATTHEW G. KAYRISH	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 1/3/2008, with respect to the rejection of claim 1, with respect of Ito's slider made of plastic have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Kasajima et al (US PG-Pub 2003/0007288) and Ito et al (Japanese Patent Number JP 359117756 A).

Regarding the arguments that the resin slider of Takahashi is not a porous resin, therefore there would be no motivation to combine, this is not persuasive, because as stated in the abstract of Ito, a porous plastic slider will help wear resistance of the slider, furthermore, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Specifically, just because the slider of Takahashi is not porous, does not mean that it cannot be made porous for the purpose resisting wear.

For the reasons disclosed above, the rejection of claims 1-11 remains. Claim 11 has been added. Claims 1-11 remain pending.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 6 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasajima et al, in view of Ito et al.

Regarding claim 1, Kasajima discloses:

A sliding member comprising a slidable substrate (figure 12, item 22) and a pressure-sensitive adhesive layer (figure 12, items 26 & 28) provided on one side thereof, and a barrier layer is provided between the slidable substrate and the pressure-sensitive adhesive layer (figure 12, items 21, 27 & 29).

Kasajima fails to specifically disclose:

Wherein the slidable substrate is a porous form comprising a plastic.

Ito discloses:

A sliding member comprising a slidable substrate (figure 1, item 1), wherein the slidable substrate is a porous form comprising a plastic (abstract).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the slider out of a porous plastic, as taught

by Ito, because this is use of a known material to produce predictable results well known in the art..

Regarding claim 2, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, Kasajima further disclosing:

Wherein the slidable substrate has a coefficient of friction of 0.2 or lower (paragraph 2, slider does not contact disc, therefore, coefficient of friction must be less than 0.2).

Regarding claim 6, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, Kasajima further disclosing:

Wherein the barrier layer comprises a thermoplastic resin (paragraph 68, acryl base is thermoplastic).

Regarding claim 9, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, Kasajima further disclosing:

Wherein the barrier layer has a thickness of 0.01-0.5 mm (paragraph 66).

Regarding claim 10, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, but fail to specifically disclose:

Wherein the barrier layer comprises polyethylene or polypropylene.

However, it is well known to one of ordinary skill in the art at the time the invention was made that polyethylene and polypropylene are both types of plastics, and widely used for many different purposes, therefore, it is a simple substitution of a well

known material to yield predictable results. Therefore, claim 10 is rejected official notice.

Regarding claim 11, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, and Kasajima further discloses:

Wherein one side of the barrier layer is adjacent to one side of the pressure-sensitive adhesive layer (figure 12, item 21 is adjacent to items 26 & 28) and the other side of the barrier layer is adjacent to one side of the slidable substrate (figure 12, items 27 & 29 are adjacent to the substrate).

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasajima et al, and Ito et al, as applied to claim 1 above, and further in view of Takahashi (US Patent Number 5657300).

Regarding claim 3, Kasajima and Ito disclose the features of base claim 1, as stated in the 103 rejection above, but fail to specifically disclose:

Wherein the slidable substrate is a porous form comprising an ultrahigh molecular weight polyethylene.

Takahashi discloses:

Wherein the slidable substrate comprises an ultrahigh molecular weight polyethylene (column 19, lines 22-34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to manufacture the slider from UHMW-PE, as taught by Takahashi, because this allows for high dimensional accuracy on molding, as stated in column 19, lines 25-27.

Regarding claim 4, Kasajima, Ito and Takahashi disclose the features of base claim 3, as stated in the 103 rejection above, but fail to specifically disclose:

Wherein the ultrahigh molecular weight polyethylene has a molecular weight of 500,000 or higher.

However, it is well known to one of ordinary skill in the art at the time the invention was made, that UHMW-PEs contain extremely long chains, and the molecular weight is usually in the range of 2-6 million. Therefore, claim 4 is rejected official notice.

Allowable Subject Matter

6. Claims 5, 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Claim 5 recites:

Wherein the porous form has a porosity of 20-70%.

Claim 7 recites:

Wherein the thermoplastic resin has a melt viscosity of 5-500 kPa•s.

These limitations, in combination with the limitations of the other claims, are neither anticipated, nor rendered obvious by any prior art of record.

The closest reference, Kasajima et al and Ito et al et al, disclose a slider that is made of plastic and having pores, but the exact porosity of this slider is not disclosed, therefore, this is not obvious. Furthermore, these references do not disclose detail of the barrier layer, therefore, this is not obvious.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW G. KAYRISH whose telephone number is (571)272-4220. The examiner can normally be reached on 8am - 5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Matthew G. Kayrish /Matthew G. Kayrish/

3/27/2008

/M. G. K./

Examiner, Art Unit 2627

/Brian E. Miller/

Primary Examiner, Art Unit 2627